Cotton/Soybean Insect Newsletter

Volume 5, Issue #10 **Edisto Research & Education Center in Blackville, SC** **29 July 2010**

Pest Alert!!!

See the section below under soybean called 'Pest Alert: Bean Plataspid' for updated information about an invasive species now on soybeans in our state.

Pest Patrol Hotline

There is a toll-free hotline for quick updates on insect problems. I will update the short message weekly for at least as long as the newsletter runs. Simply call the free number **(877) 285-8525** and select the messages you would like to hear (I am #7 on the listing of specialists). The hotline is sponsored by Syngenta Crop Science.

News from Above the Lakes

Randy Cubbage, county agent covering Lee, Kershaw, and Sumter Counties reported that corn earworm pressure in soybeans is above threshold in certain locations, even in soybeans about to bloom.

News from Below the Lakes

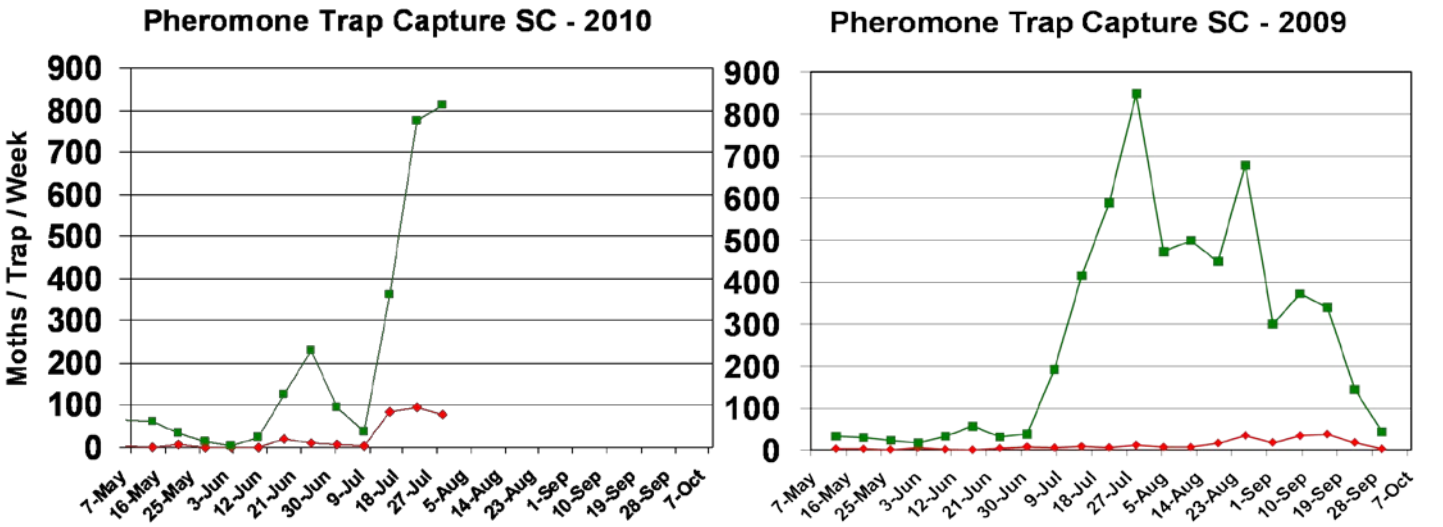
Charles Davis, county agent covering Calhoun and Orangeburg Counties, reported late last week that he was "seeing a lot of soybean loopers in the beans I looked at….most were under a half inch. Corn earworm is strong in peanuts and numbers are climbing in cotton. Also found a few fall armyworms. Haven't seen a lot of stink bugs in cotton, but most of our cotton has been sprayed once and I am sure that knocked the numbers down a bit." Jonathan Croft, county agent covering Dorchester and Berkeley Counties, reported last week that he has checked several patches of kudzu and soybean fields in Dorchester and Berkeley Counties without finding the bean plataspid. See "Pest Alert: Bean Plataspid' for updated information about this pest.

Cotton Situation

As of 26 July 2010, the USDA NASS South Carolina Statistical Office had our progress at 93% of the crop as squaring, equal to where we were last year at 93% and the 5-yr average of 87%. About 37% of the crop has set bolls, slightly ahead of 35% for last year and 34% for the 5-yr average. Conditions were described as 9% excellent, 54% good, 30% fair, 7% poor, and 0% very poor for the crop. Before the rains this week, the overall moisture levels in the state were described as 21% very short, 35% short, 39% adequate, and 5% surplus. Scattered rains have improved the moisture situation in those areas fortunate enough to receive rain. **IT IS STILL TIME TO "SCOUT HARD" AND PROTECT COTTON FROM STINK BUGS AND ESCAPED BOLLWORM! PRESSURE REMAINS HIGH FROM BOLLWORM AND STINK BUGS ACROSS THE STATE!**

Bollworm & Tobacco Budworm

Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season and last season are presented. The scales on the charts are the same to illustrate where we are compared with last year. Our trap numbers were high again this past week – we caught over 8,000 moths! Accordingly, our egg and worm counts remain up this week. Under this intense pressure, all cotton (regardless of Bt technology) is susceptible to injury from bollworm. The pressure is just too much, and some of the caterpillars will make it through the technology. If you are flushing numerous moths and seeing multiple eggs per plant, you are probably experiencing pressure rivaling our bollworm flight at EREC. Anyone growing non-Bt cotton probably wishes they did not this season. Trap capture of tobacco budworm is the highest I have seen in recent years. However, my graduate students looked at the mandibles of 110 large caterpillars from non-Bt cotton today and 4.5% were TBW, with the majority (95.5%) being BW. Because the bollworm continues to be an important pest of cotton and soybean, we will continue to monitor the progress of this pest.



Cotton Insect Control Guide

Clemson University Publication IC97 (Cotton Insect Management) has been revised for 2010 and is available free from your local county office. It is also available online at:
http://www.clemson.edu/psapublishing/PAGES/ENTOM/IC97.pdf

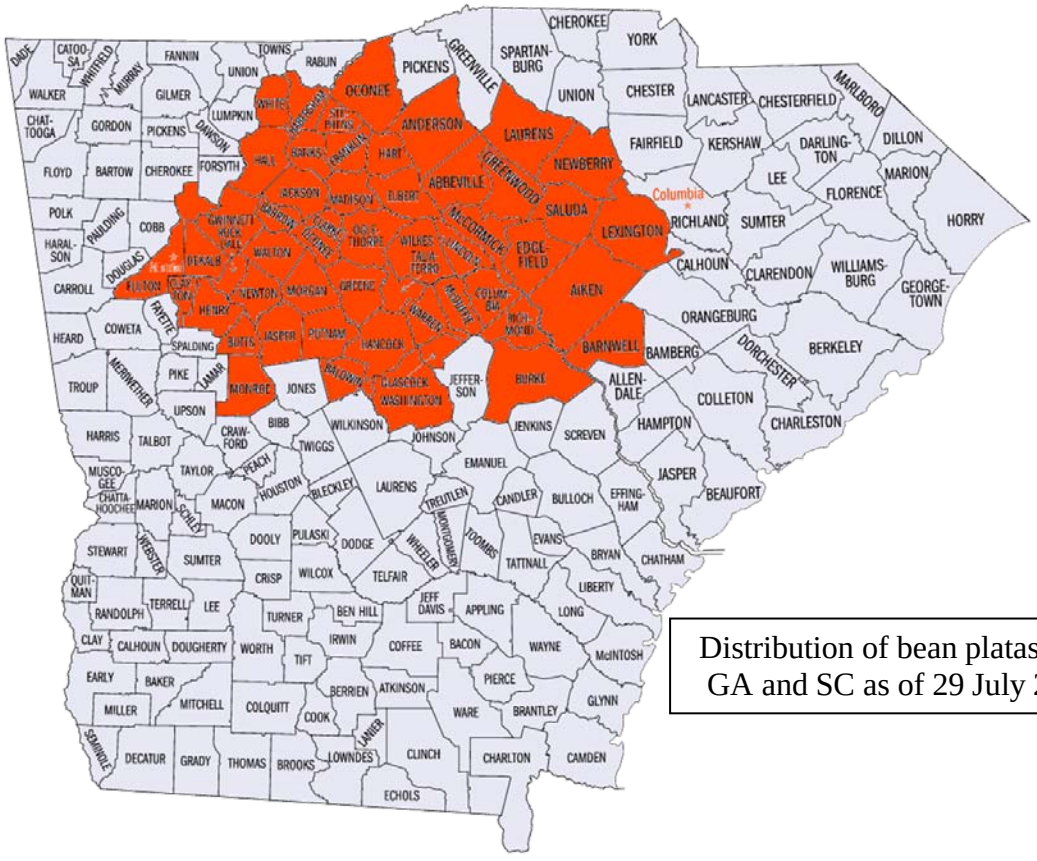
Soybean Situation

As of 26 July 2010, the USDA NASS South Carolina Statistical Office had our progress at about 100% of soybeans emerged, equal to where we were last year at 100% and the 5-yr average of 100%. About 43% of soybeans have bloomed, ahead of last year's 28% and the 5-yr average of 36%. About 17% of the crop has set

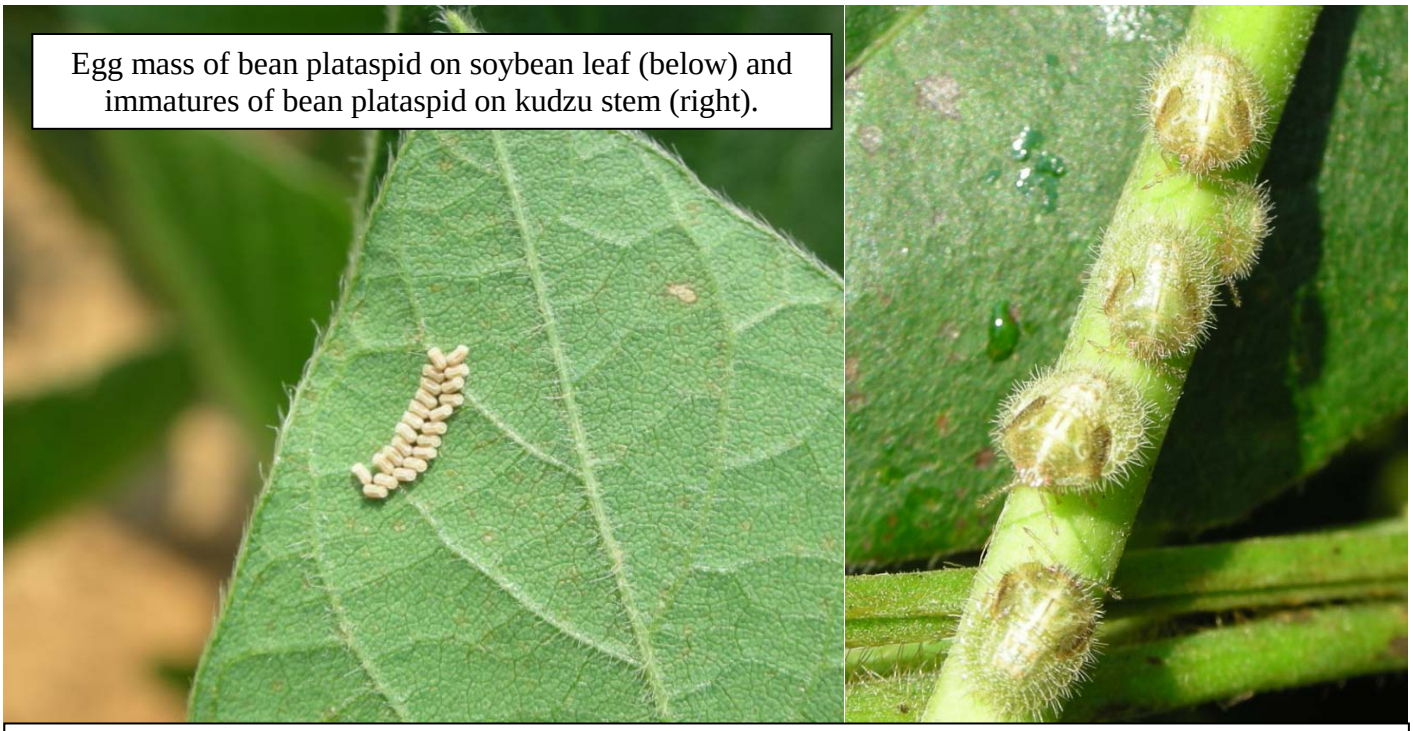
pods, well ahead of where we were last year at 6% and the 5-yr average of 10%. Conditions were described as 3% excellent, 43% good, 36% fair, 15% poor, and 3% very poor. These are observed/perceived state-wide averages.

Pest Alert: Bean Plataspid!

The bean plataspid, *Megacopta cribraria*, is quickly spreading to other areas. My post-doctoral research associate, Dr. David Degenhardt, and I visited 8 counties on Tuesday in an attempt to find (or not find) the bean plataspid in counties previously not reporting detection of the invasive pest. We found the bean plataspid in every patch of kudzu we visited in Aiken, Edgefield, McCormick, Greenwood, Laurens, Saluda, Newberry, and Lexington Counties. It was very easy to find. We also found it in soybeans in Aiken, Saluda, and Lexington Counties. That brings the total number of counties in SC reporting the pest to 12. ***The bean plataspid has been confirmed in Oconee, Anderson, Abbeville, Barnwell, Aiken, Edgefield, McCormick, Greenwood, Laurens, Saluda, Newberry, and Lexington Counties in SC (see map below). It has been found on kudzu and soybeans but will feed on legumes in general, so it could be on other hosts, and it might be present but yet to be detected in other counties***. The best place to look for these pests is in kudzu. If you want to help document new county finds of this pest, please let me know. Digital pictures or specimens preserved in alcohol are important documentation to get from infested areas. Please email that information to me.



Distribution of bean plataspid in GA and SC as of 29 July 2010.



Egg mass of bean plataspid on soybean leaf (below) and immatures of bean plataspid on kudzu stem (right).

Plataspids and US dime on soybean leaf (below left) and close-up of bean plataspid adult (below right) found on soybean in Barnwell County, SC (2010).

Preliminary observations indicate that control with insecticides is attainable, but we still do not know what economic losses might be incurred from this pest and continue to learn about it. Quick re-infestation of fields could be a concern after an initial insecticide application. Updates will be provided weekly in the newsletter.

Soybean Insect Control

Bean plataspid aside, we need to focus on the pests that we know are causing economic losses right now. As you know, those pests are corn earworm (a.k.a. bollworm, podworm, fruitworm, etc.) and stink bugs. There is tremendous corn earworm activity right now in terms of egg lay and caterpillar damage, so be on the lookout for corn earworm on soybeans setting pods or blooming. The threshold for corn earworm is 2/rowft. Stink bugs will be building on soybeans that have not been treated for corn earworm – stink bug threshold is 1/rowft.

Pictured are green stink bug immatures (above left), 5th instar of southern green stink bug (above right), and corn earworm on soybeans (below and right).

Soybean Insect Control Guide

Clemson University Publication SL1 (Soybean Insect Management) has been revised for 2010 and is available free from your local county office. It is also available online at:
http://www.clemson.edu/psapublishing/PAGES/AGRO/SL1.pdf

Pest Management Handbook - 2010

Insect control recommendations are also available online in the 2010 Pest Management Handbook at:
http://www.clemson.edu/extension/rowcrops/pest/index.html

Need More Information?

Log on to the following web pages to view important cotton management recommendations, data, and historical cotton insect newsletters:
http://www.clemson.edu/public/rec/edisto/research/cotton.html
http://www.clemson.edu/extension/rowcrops/cotton/index.html

Sincerely,

Jeremy K. Greene, Ph.D.
Associate Professor – Entomologist

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http://www.clemson.edu